



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/848,929	05/18/2004	Ray Winston Freeman JR.	1029-358-CIP	5694
22442	7590	09/19/2006	EXAMINER	
SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			O'CONNOR, CARY E	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/848,929	<b>Applicant(s)</b> FREEMAN ET AL.	
	<b>Examiner</b> Cary E. O'Connor	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-36 is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9,11-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 5,10 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>71006</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 9, 11, 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franseen et al (5,470,228) in view of Andreiko et al (5,622,494) and JP 11-27650. Franseen shows a number of different embodiments of brackets corresponding to the claimed structure. Figures 1A-1C corresponds to the structure set forth in claims 1-6, such as the tie wings, center leg, notches and elliptical configuration. Figure 4D shows structure corresponding to the structure set forth in claims 7-11, i.e. the trapezoidal configuration, and Figure 5B and 6B show structure corresponding to the structure set forth in claims 12-16, namely the convex portions 44 extending labially from the archwire floor. Franseen does not disclose a base having a substantially continuous pattern of characters and intermediate space and including a discontinuous perimeter rail. Andreiko shows an orthodontic bracket 10 comprising a body 12 and a base 110 connected to the body. The base includes an exterior surface 114 which includes a substantially continuous pattern of characters 199 and intermediate spaces. JP 11-276504 shows an orthodontic bracket comprising a body 2 and a base 1 connected to the body. The base includes an exterior surface having a discontinuous perimeter rail having a perimeter length and at least one cavity along its

length (see Figs. 3 and 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the base of Franseen with a substantially continuous pattern of characters and intermediate space and a discontinuous perimeter rail, in view of Andreiko and JP 11-27650, in order to increase the bond strength of the bracket.

Claims 3, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franseen et al (5,470,228) in view of Andreiko et al (5,622,494) and JP 11-27650, as applied to claims 1, 7 and 12, and further in view of Webb (4,430,061). The bracket of Franseen as modified by Andreiko and JP 11-27650 does not disclose the surface finish of the perimeter rail. Webb shows an orthodontic bracket comprising a base that is formed with means to increase the bonding strength of the bracket. The bracket, including the base, is polished to have a smooth surface for comfort and aesthetic reasons. It would have been obvious to one of ordinary skill in the art at the time the invention was made to smooth the rail surfaces of the bracket of Andreiko as modified by Andreiko and JP 11-27650, as taught by Webb, to make the bracket more comfortable and aesthetic.

***Allowable Subject Matter***

Claims 5, 10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17-36 are allowed.

***Drawings***

The drawings were received on July 10, 2006. These drawings are approved by the examiner.

***Response to Arguments***

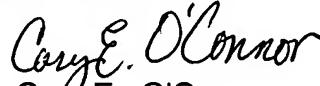
Applicant's arguments filed July 10, 2006 have been fully considered but they are not persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner has stated that one of ordinary skill in the art would be motivated to combine the features of Andreiko and JP 11-27650 to increase bond strength of the bracket, which would be desirable to prevent the bracket from prematurely debonding from the tooth.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-2724964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

ceo